## **CLAIMS:**

## 1. A compound of formula I:

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 $Ar^1$   $Ar^2$   $R^1$   $Ar^2$ 

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or a pharmaceutically acceptable salt thereof, wherein:

X is selected from a valence bond,  $-CH_2-$ , -NH-, -S- or -O-;

Z is selected from =CH- or =N-;

Y is selected from a valence bond or -CH2-;

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R2 is hydrogen or methyl and R1 is selected from

R1 is hydrogen or methyl and R2 is selected from -H, Q-CO<sub>2</sub>H, Q-1H-tetrazol-5-yl, Q-CN, or Q-R5, wherein R5 is a functional group that is hydrolized to -CO<sub>2</sub>H in physiological conditions, wherein each Q is independently selected from a valence bond or an optionally substituted C1-3 alkylidene chain, wherein one or two

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non-adjacent methylene units of Q are optionally and independently replaced by -O-, -S- or -NH-;

Ar1 and Ar2 are independently selected from a 3-10 membered monocyclic or bicyclic saturated or unsatu-5 rated cycloalkyl, an ensemble of two 3-8 membered monocyclic rings covalently linked by a C-, N-, O- or S-atom, or 5-10 membered monocyclic or bicyclic aryl ring having 0-4 heteroatoms independently selected 10 from nitrogen, oxygen, or sulphur, wherein Ar1 and/or Ar2 is optionally and independently substituted by one to four R3 groups and each R3 is independently selected from -R5-trifluoromethyl, -R6-R4, -R6-F, -R6-C1, -R6-Br, -R6-J, -R6-NO<sub>2</sub>, -R6-CN, -R6-O-R4, 15 -R6-(CH<sub>2</sub>)<sub>n</sub>-O-R4 (n=1,2,3,4,5,6,7,or 8), -R6-S-R4,  $-R6-N(R4)_2$ , -R6-NR4-CO-R4,  $-R6-NR4-CO-N(R4)_2$ , -R6-NR4-CO-O-R4, -R6-CO-R4, -R6-CO-O-R4,  $-R6-CO-N(R4)_2$ ,  $-R6-O-CO-N(R4)_2$ , -R6-SO-R4,  $-R6-SO_2R4$ ,  $-R6-SO_2N(R4)_2$ ,  $-R6-NR4-SO_2R4$ ,  $-R6-NR4-SO_2N(R4)_2$ , 20 -R6-CO-NR4-CO-R4, or -R6-CO-CH2-CO-R4; wherein each R4 is independently selected from hydrogen, or from an optionally substituted C1-6 aliphatic group, wherein R6 is a valence bond or a bivalent spacer group, in particular C1-6 aliphatic group, and wherein two R3 on adjacent positions on Ar3 are optionally taken 25 together to form a saturated, partially unsaturated, or fully unsaturated 4-6 membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulphur.

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2. A compound according to claim 1, wherein Ar1 and Ar2 are independently 3-8 membered monocyclic, or 8-10

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membered bicyclic cycloalkyl, or 5-6 membered monocyclic or 8-10 bicyclic aryl ring, or 5-6 membered monocylic or 8-10 membered biccylic heteroaryl ring having 1-4 heteroatoms.

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- 3. A compound according to claim 1 or 2, wherein Ar1 and Ar2 are independently selected from phenyl, indolyl, naphtyl, pyrimidinyl, pyridinyl, quinolyl, or isoquinolyl, wherein as an option Ar1 and/or A.2 is substituted by 1-4 R3 groups.
- 4. A compound according to one of the claims 1 to 3,
  wherein X is a valence bond, Z is a nitrogen, Y is
  -CH<sub>2</sub>-, R2 is -H, and R1 is selected from -Q-CO<sub>2</sub>H,
  Q-1H-tetrazol-5-yl, -Q-CN, wherein each Q is independently selected from a valence bond or an optionally substituted C1-3 alkylidene chain, wherein one or two non-adjacent methylene units of Q are optionally and independently replaced by -O-, -S- or -NH-.
- 5. A compound according to one of the claims 1 to 3,
  wherein X is a valence bond, Z is =CH-, Y is a valence bond, R2 is -H, and R1 is selected from -Q-CO<sub>2</sub>H,
  Q-1H-tetrazol-5-yl, -Q-CN, wherein each Q is independently selected from a valence bond or an optionally substituted C1-3 alkylidene chain, wherein one or two non-adjacent methylene units of Q are optionally and independently replaced by -O-, -S- or -NH-.

6. A compound according to one of the claims 1 to 3, wherein X is -NH-, Z is =CH-, Y is a valence bond, R2 is -H, and R1 is selected from -Q-CO<sub>2</sub>H, Q-1H-tetrazol-5-yl, -Q-CN, wherein each Q is independently selected from a valence bond or an optionally substituted C1-3 alkylidene chain, wherein one or two non-adjacent methylene units of Q are optionally and independently replaced by -O-, -S- or -NH-.

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7. A compound according to one of the claims 1 to 3, wherein X is -NH-, Z is =CH-, Y is a valence bond, R1 is -H, and R2 is selected from -Q-CO<sub>2</sub>H, Q-1H-tetrazol-5-yl, -Q-CN, wherein each Q is independently selected from a valence bond or an optionally substituted C1-3 alkylidene chain, wherein one or two non-adjacent methylene units of Q are optionally and independently replaced by -O-, -S- or -NH-.

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- 8. A compound according to one of the claims 1 to 7 being effective to modulate and/or regulate in vitro and/or in vivo the activity of an AGC kinase containing a PIP pocket homologuos site in the small lobe of the kinase domain, in particular being effective to activate or inhibit PDK1 and/or PKB.
- 9. Use of a compound according to one of the claims 1 to30 8 for the preparation of a pharmaceutical composition.

10. Use according to claim 9, wherein a physiologically effective dose of the compound is mixed with an pharmaceutically acceptable carrier.

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- 11. Use according to one of the claims 9 or 10, for the preparation of a pharmaceutical composition for the prevention or treatment of a disease related to an AGC kinase, in particular PDK1 and/or PKB, having an abnormal high or low activity.
- 12. Method for preventing or treating a disease related to an AGC kinase, in particular PDK1 and/or PKB, having an abnormal high or low activity, wherein a compound according to one of the claims 1 to 8 or a pharmaceutical composition according to one of the claims 9 to 11 is administered to an organism having the risk of obtaining the disease or suffering from the disease in a physiologically effective dose.

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